

REMARKS

Claims 16-30 are pending in the present application. Claims 17-27 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. Claims 16-17, and 28-30 were amended in this response to improve form. No new matter has been introduced as a result of the amendments. Favorable reconsideration is respectfully requested.

The drawings were objected to for failing to comply with 37 C.F.R. §1.84(p)(5) for not including reference character “MMI.” In light of the amendment to the specification detailed above, Applicants submit the objection has been resolved. In addition, applicants wish to point out that MMI is also referenced at the bottom of page 14 (last paragraph) as well. Withdrawal of the objection to the drawings is respectfully requested.

The Office Action also objected to the specification for not commencing the Abstract on a separate sheet of paper. In light of the amendment to the specification detailed above, Applicants submit the objection has been resolved. Withdrawal of the objection to the specification is respectfully requested.

Claims 16, 17, 28, 29, and 30 were objected to for informalities. Specifically, it was submitted that claims 16, 29 and 30 do not define values for j and k associated with K1 and K2. Applicants respectfully submit that this is not the case. K1(j) and K2(k) are recited in the claims as being first and second respective partial sequences of signal sequence K(i) and are also discussed, for example, on page 16 of the present specification. Accordingly, Applicants submit that the claim terms in this regard are clear, and that the objection be withdrawn.

Similarly, claims 17 and 28 were objected to for not including a definition of variable “a.” Applicants submit that such a definition is present in the claims. The claims recite forming a synchronization sequence K of length 256 to be emitted by the base station, as follows from a partial signal sequence “a” consisting of 16 elements: $K = \langle a, a, a, -a, -a, a, -a, -a, a, a, a, -a, a, -a, a, a \rangle$. Applicants submit that the claim terms in this regard are clear, and that the objection be withdrawn.

Regarding claim 28, Applicants do not understand what the objectionable matter is. Applicants are not aware of any provision in the MPEP that restricts the recitation of putatively broad claims. Applicants respectfully request the objection be withdrawn.

Claims 16, 29 and 30 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Popovic* (U.S. Patent No. 6,567,482). Applicant respectfully traverses this rejection. Favorable reconsideration is requested.

Specifically, as the Office Action recognizes, *Popovic* does not teach the modulation of the second partial signal sequence $K_2(k)$ can be obtained using the following rule: $K(i) = K_2(i \bmod n_2) * K_1(i \bmod n_2)$, for $i = 0 \dots n_1 * n_2 - 1$, as recited in claims 16, 29 and 30. To this end, the Office Action relies on col. 10, lines 7-30 and col. 11, lines 54-60 to conclude that the construction of any synchronization sequences would be an obvious variation to the teaching of *Popovic*. This reasoning is simply incorrect. Regarding col. 10, lines 7-30, this passage merely recognizes that complementary pair of sequences having a property that the sum of their aperiodic autocorrelations equals zero for all non-zero shifts, lend themselves one or more options for synchronization sequences under the teaching of *Popovic* (col. 10, lines 7-23). Col. 11, lines 54-60 only states that a Golay complementary sequence generator is an attractive option (col. 11, line 13) for the configuration disclosed therein.

In contrast, the present claims recite a signal sequence $K(i)$ in accordance with a relationship wherein a partial second signal sequence $K_2(k)$ of length $n_2=16$ is repeated $n_1=16$ times and is modulated in the process by the first partial signal sequence $K_1(j)$ of length $n_1=16$, the modulation of the second partial signal sequence $K_2(k)$ can be obtained using the aforementioned relationship. No such configuration is disclosed in *Popovic*.

Furthermore, there is no teaching suggestion or motivation in the *Popovic* reference that could properly serve as a basis for obviousness as submitted in the Office Action. The Patent Office has the initial burden of proving a *prima facie* case of obviousness. *In re Rijckaert*, 28 U.S.P.Q. 2d 1955, 1956 (Fed. Cir. 1993). In making this determination, the question is not whether the differences between the prior art and the claims themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. *Stratoflex, Inc. v. Aeroquip Corp.*, 218 U.S.P.Q. 871 (Fed. Cir. 1983)(emphasis added). The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed

invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). When the motivation to combine the teachings of the references is not immediately apparent, it is the duty of the examiner to explain why the combination of the teachings is proper. *Ex parte Skinner*, 2 USPQ2d 1788 (Bd. Pat. App. & Inter. 1986). (see MPEP 2142).

Further, the Federal Circuit has held that it is "impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious." *In re Fritch*, 23 U.S.P.Q.2d 1780, 1784 (Fed. Cir. 1992). "One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention" *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

Moreover, the Federal Circuit has held that "obvious to try" is not the proper standard under 35 U.S.C. §103. *Ex parte Goldgaber*, 41 U.S.P.Q.2d 1172, 1177 (Fed. Cir. 1996). "An-obvious-to-try situation exists when a general disclosure may pique the scientist curiosity, such that further investigation might be done as a result of the disclosure, but the disclosure itself does not contain a sufficient teaching of how to obtain the desired result, or that the claim result would be obtained if certain directions were pursued." *In re Eli Lilly and Co.*, 14 U.S.P.Q.2d 1741, 1743 (Fed. Cir. 1990).

Applicants submit that the rejection under 35 U.S.C. §103 is improper and should be withdrawn, as this burden has not been met. In light of the above remarks, Applicant submit that the application is in condition for allowance and request that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

BELL, BOYD & LLOYD LLC

BY



Peter Zura
Reg. No. 48,196
P.O. Box 1135
Chicago, Illinois 60690-1135
Phone: (312) 807-4208

Dated: June 9, 2005